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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,421	01/04/2002	Hiromichi Akimoto	AKIMOTO4	2427
1444	7590	10/19/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			RAGONESE, ANDREA M	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,421

Applicant(s)

AKIMOTO ET AL.

Examiner

Andrea M. Ragonese

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☒ Claim(s) 18-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on February 26, 2004 has been entered. Examiner acknowledges that **claims 9-16** have been canceled and **claim 17-24** have been added.

2. In view of telephonic discussion between Supervisory Patent Examiner Henry Bennett and Attorney Norman Latker on October 5, 2004, the finality of the previous Office action, mail date April 5, 2004, has been withdrawn. However, the 102(b) rejection of **claim 17**, as described in the previous Office Action, is hereby repeated in this non-final rejection on the merits.

Response to Arguments

3. Applicant's arguments filed February 26, 2004 have been fully considered but they are not persuasive.

4. On page 11, Applicant states that "claims 17-24 have been drafted to better identify the structural differences and the result achieved therefrom from those of Scheibel...". Examiner strongly disagrees because Scheibel shows all the structural features as claimed by Applicant (see paragraph 7 of this Office action for detailed explanation). In addition, Applicant stated that "the Scheibel device does not teach the forming of an 'ice-lining' or the engagement of a liquid material into such ice-lining in a uniform thickness as claimed by Applicant." Applicant is relying on the apparent operation of the claimed device to distinguish over the prior art. Functional language does not hold patentable weight in apparatus claims. The MPEP § 2114 [R-1] states,

Art Unit: 3743

"While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function." See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

5. Subsequently, Examiner would also like to note that critical subject matter, such as the aforementioned "ice-lining", is not positively recited, and as a result, the newly presented claims do not define over the prior art of record. Specifically, Scheibel is capable of forming an "ice-lining" or engaging a liquid material into such an ice-lining in a uniform thickness.

Claim Objections

6. **Claims 18-24** are objected to as being incomplete because the claim(s) on which they depend from has been cancelled in a previous amendment. Accordingly, **claims 18-24** have not been further treated on the merits.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3743

8. **Claim 17** is rejected under 35 U.S.C. 102(b) as being anticipated by Scheibel (US 3,396,475). Scheibel discloses a freeze-drying apparatus, as shown in the Figure, which comprises:

- a main body part **24** constructed by assembling an upright cylindrical tube for freezing material to be dried, which is prepared in liquid form, onto the inner wall surface of said cylindrical tube;
- a jacket **18** provided on and around the outer periphery of said tube in a substantially concentric cylindrical shape to cause heat medium to circulate within said tube;
- a duct communicating to a vacuum exhaust system being connected to the upper end side of said tube of the main body part **24**, either directly or through a chamber (column 4, lines 16-18);
- while an opening-closing valve (in passageway **19**) being installed on the lower end side of said tube, or a recovery chamber **21** equipped with a valve being connected to the bottom part of said tube; and
- an inlet port for feeding said material in liquid form into the inner bore of said tube being provided in either the upper or lower part of said tube, said feeding port being connected to the downstream side of the passageway **26** for feeding said material in liquid form.

Art Unit: 3743

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Andrea M. Ragonese** whose telephone number is **(703) 306-4055**. The examiner can normally be reached on Monday through Friday from 8 am until 4:30 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

amr
October 5, 2004

Henry A. Bennett
Supervisory Patent Examiner
Group 3700